

## ABSTRACT OF THE DISCLOSURE

The present invention provides a method of manufacturing a gallium nitride single crystal that can suppress the decomposition of gallium nitride and improve production efficiency in a sublimation method.

According to the manufacturing method, a material (GaN powder) for the gallium nitride (GaN) single crystal is placed inside a crucible, sublimed or evaporated by heating, and cooled on a substrate surface to return to a solid again, so that the gallium nitride single crystal is grown on the substrate surface. The growth of the single crystal is performed under pressure. The pressure is preferably not less than 5 atm ( $5 \times 1.013 \times 10^5$  Pa). The single crystal is grown preferably in a mixed gas atmosphere containing NH<sub>3</sub> and N<sub>2</sub>.